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May 31, 1985 File #495-1



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Mr. Ron Kolzow
Waste Management Branch
Technical Permits and Compliance Section
United States Environmental
Protection Agency
Region V
230 South Dearborn
12th Floor
Chicago, Illinois 60604

Re: Hukill Chemical Corporation

Bedford, Ohio EPA ID No. OHD 001926740

Dear Mr. Kolzow:

We are pleased to submit three (3) copies of our engineering report entitled "Plan for Determining the Extent of Potential Contamination" for your review. This report is submitted pursuant to the Compliance Order dated December 27, 1984 and subsequent directives by the Environmental Protection Agency (EPA).

The Flan presents the work that will be conducted to: determine the nature and extent of potential contamination due to storage operations in the tank farm; determine the need for corrective actions; and select and implement the EPA approved corrective action.

Comments of the EPA on the draft Plan, submitted to Hukill Chemical Corporation in a letter dated April 23, 1985, have been addressed.

If you have any questions, please do not hesitate to call.

Very truly yours,

EDER ASSOCIATES CONSULTING ENGINEERS, P.C.

Gary A. Rozmus, P.E.

Vice President

GAR/tg

HUKILL CHEMICAL CORPORATION BEDFORD, OHIO

PLAN FOR DETERMINING
THE EXTENT OF
POTENTIAL CONTAMINATION

PROJECT #495-1 MAY 1985

EDER ASSOCIATES
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I. INTRODUCTION

Purpose

Hukill Chemical Corporation (HCC) owns and operates a chemical processing facility located at 7013 Krick Road, Bedford, Ohio. The Company operates a tank farm located on the north side of the facility. The tank farm is used for the storage of spent and reclaimed solvents. The United States Environmental Protection Agency (EPA), Region V, is requiring HCC to conduct an investigation to: determine the nature and extent of potential contamination due to storage operations in the tank farm; determine the need for corrective actions to eliminate potential threats to the environment; and select and implement the EPA approved corrective action.

Scope

This investigation will consist of six tasks:

Task 1: Background Information

Task 2: Site Investigation

Task 3: Report of Site Investigation

Task 4: Review of Alternative Corrective Actions

Task 5: Conceptual Design of Selected Alternative

Task 6: Corrective Action Study Report

This report will detail the work to be conducted during Tasks 1 through 6.

A plan for corrective action will be determined, if required, at the conclusion of Task 6. At such time, HCC will implement the approved plan, if required, in accordance with the approved implementation schedule.

II. TASK 1 - BACKGROUND INFORMATION

Task 1 involves obtaining background information pertinent to the HCC site. This information includes: well logs of existing monitoring wells; hydrogeological and geological data, including information pertaining to groundwater at the site; existing site sampling data; and a list of materials stored in the tank farm, both at present and in the past.

The collection of background information has been completed. A list of the tanks located in the tank farm and tank volumes is presented in Table 1. The locations of the tanks are identified in Figure 4 of Section 2.3 of this report. The chemicals stored in the tanks, both in the past and present, consist of the organics listed in Table 2 of Section 2.4 of this report. The storage of specific chemicals cannot be associated with specific tanks located in the tank farm. Table 1 presents a list of the tanks and the tank volumes.

The background information will be utilized in the site investigation to identify potential contaminants, areas of contamination, and the appropriate means for determining the extent of potential contamination.

HUKILL CHEMICAL CORPORATION BEDFORD, OHIO

TABLE 1

LIST OF STORAGE TANKS IN TANK FARM

Tank I.D. No.	Volume (gallons)
V110	10,000
V 210	10,000
V310	10,000
V410	10,000
V 510	10,000
V610	10,000
V7 10	10,000
V810	10,000
V910	10,000
V15	5,000
V 19	9,000
V 29	9,000
V 39	9,000
V114	14,000
V214	14,000
V314	14,000
V414	14,000
V514	14,000
V614	14,000
V714	14,000
V112	12,000

Table 1 Continued . .

Tank I.D. No.		Volume (gallons)
V117		17,000
H15		5,000
H25		5,000
H35		5,000
H45		5,000
H55		5,000
H65		5,000
H75		3,000
H13	•	3,000
H23		3,000
н33		3,000
H43	<u> </u>	3,000
H125	•	2,500
H225		2,500
H325		2,500
H425		2,500
6000W		6,000
6000E		6,000
•	•	the second secon

III. TASK 2 - SITE INVESTIGATION

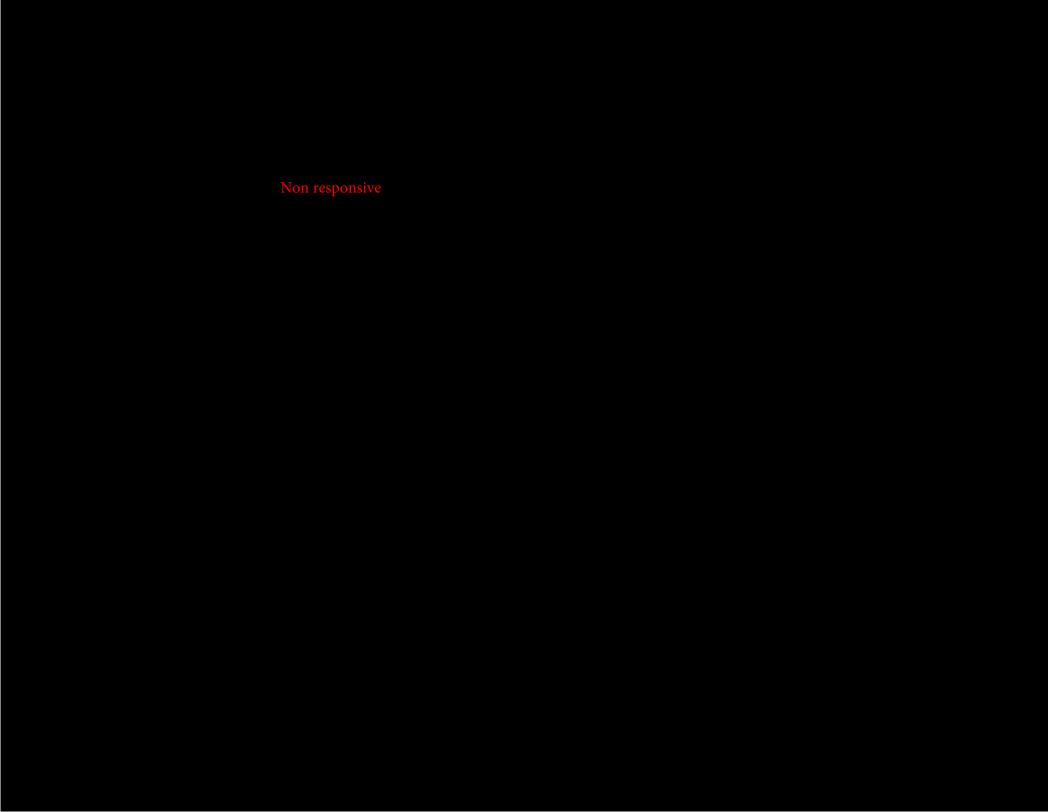
2.1 - Introduction

A site investigation in and around the area of the tank farm at the HCC facility will be conducted to characterize the site and its actual or potential hazard, if any, to public health and the environment. The site investigation will result in data to assist in assessing corrective action alternatives. The investigation will include: the installation of additional groundwater monitoring wells and groundwater analyses; and soil sampling and analyses at various locations in and around the tank farm. The work required for this investigation is discussed in the following sections.

2.2 - Groundwater Monitoring

The location of existing and proposed groundwater monitoring wells is shown in Figure 1, the site plan of the facility. The proposed wells are strategically placed in order to determine whether potential contaminants have entered the groundwater, and if so to determine the concentrations and extent of contaminants. Figure 1 shows the installation of three new monitoring wells. Each of these wells will be a shallow well. Shallow wells will intercept groundwater flow in the upper layers consisting of weathered shale.

Groundwater flow directions at the site is to the north and east towards the tributary to Tinkers Creek, shown in Figure 1. Monitoring wells A, B and C will be located immediately outside of the earthern berm on the north side of the tank farm. These wells will assist in detecting the presence of contaminants in the groundwater flowing to the north and northeast. Existing monitoring well SW-4 is located east of the tank farm. This well will assist in detecting the presence of contaminants in the groundwater flowing to the east.



Groundwater samples will be collected from all new and existing Samples will be appropriately handled, filtered and preserved prior to analyses, in accordance with the projects' Quality Assurance Program Plan (QAPP) appended to this report. The parameters that will be analyzed are listed in Table 2 in Section 2.4. If contaminants are identified in the groundwater samples, a fourth, deep well (Well D) be installed near the shallow well showing the highest concentration of contaminants. The deep well will intercept groundwater flow in the shale bedrock layer and will assist in determining the vertical extent of contamination. In identifying the extent of contamination, samples will be defined as contaminated if the concentrations of parameters analyzed are greater than the upgradient concentrations and greater than concentrations given in 1) USEPA Ambient Water Quality Criteria, 2) USEPA Maximum Contaminant Levels (MCL), 3) USEPA Recommended Maximum Contaminant Levels (RMCL), 4) USEPA Suggested No-Adverse Response Levels (SNARLS) or 5) OEPA Water Quality Standards. The extent of contamination will be determined by comparing the concentrations of contaminants downgradient wells with the concentrations in the upgradient well. The installation of additional monitoring wells may be required if contamination is found to be occurring and the installed wells do not provide sufficient information to determine its extent.

Groundwater samples for analysis will be collected on a quarterly basis for one year. The initial sampling will be performed upon the installation of wells A, B and C. The work outlined in the remaining sections of this Plan will proceed during the groundwater sampling period.

Protocols for drilling, sampling and chemical analyses of the groundwater are discussed and detailed in the QAPP. Removal of water in the shallow wells before sampling will be accomplished using bailers in the shallow wells and using a displacement type pump in the deep well, if required. Samples from all wells will be collected using a bailer. Bailed water will be stored on-site until the analyses have been completed. Final disposition of bailed water will be determined upon review of sample analyses.

The results of the sampling analyses of the new and existing downgradient wells will be compared to the results of analyses from the existing upgradient well. The existing upgradient well is identified as SW-l in Figure 1. A VOC scan will be performed on samples from the upgradient and the downgradient wells. If comparison of the VOC scans indicates that the upgradient well does not adequately monitor the quality of groundwater flowing to the HCC facility, then the installation of an additional upgradient well may be required.

Shallow monitoring wells will be constructed of two (2) inch diameter stainless steel casing. Joints will be threaded and wrapped with teflon tape. Each well will be screened with five (5) feet of ten (10) slot (0.010 inch) screen. A bentonite seal will be placed between the boring hole and the well casing. A locking cap will be placed on the top of the well casing. In addition, a concrete pad will be poured around the well casing at grade to prevent runoff from entering the space between the borehole and the well casing. A typical shallow well installation is shown in Figure 2. Shallow wells will be installed using a hollow stem auger.

The depth of the shallow wells is determined by the depth to groundwater encountered at the site in a layer of weathered shale. A five (5) ft well screen, rather than a ten ft screen was selected in order to obtain a more representative sample of groundwater in the weathered shale layer. The hydrogeological conditions of the site were obtained from well records and drilling logs of existing monitoring wells, SW-1, SW-2, SW-3 and SW-4. The records and logs are included in this report in Appendix C.

A deep well may be installed at the facility. The location of the deep well will be determined by the shallow monitoring well showing the highest level of contamination if any is found to be occurring. The deep well will extend into shale bedrock. The depth of the well is based on the hydrogeological site conditions as given in the

Non responsive

records and logs of existing wells. The records and logs are included in Appendix C. The well installation will include an inner four (4) inch diameter, stainless steel well casing and an outer six (6) inch black steel well casing. The inner casing will extend fifteen (15) ft in the shale bedrock layer. The lower 10 ft of the inner casing will be sawcut in order to obtain a representative sample of groundwater quality in the shale layer. The six (6) inch outer casing will extend five (5) ft into shale bedrock in order to ensure a good seal between the two water bearing zones (weathered shale and shale bedrock). The annular space between the six (6) inch casing and the boring will be grouted with a cement/bentonite grout mixture. A well screen is not required for the deep well. This deep well design will minimize the potential of cross-contamination between groundwater flowing in the upper permeable materials and deeper impermeable layers. A typical deep well is shown in Figure 3. A locking cap will be placed on top of the well casing and a concrete pad will be poured around the well casing at grade.

2.3 Soil Analyses

Surface and subsurface soil samples will be collected in the tank farm and around the tank farm area in order to define the extent of potential contamination. The locations of the borings required for soil samples are shown in Figure 4. The soil sampling locations were selected to include 1) areas where suspected spills may have occurred, 2) areas where precipitation has been observed to accumulate, 3) areas where drainage of precipitation has occurred and 4) remaining general areas in and around the tank farm.

Samples will be collected using a split spoon sampler. In the tank farm, samples will be collected at the following elevations:

- a. Surface to 1.5 ft deep
- b. 1.5 to 3.0 ft deep
- c. 3.0 to 4.5 ft deep
- d. at 3 ft intervals thereafter





Outside of the tank farm, soil samples will be collected from between the surface to 1.5 ft deep and at 3.0 ft intervals thereafter. All borings will be drilled to the depth of the groundwater or to depth of bedrock, if no groundwater is encountered during drilling.

All soil samples that are collected will be analyzed in the field for total VOC using a portable organic vapor analyzer (OVA). The results of the OVA will be used to determine specific soil samples that will be subject to the organic chemical analyses listed in Table 2 of Section 2.4. The OVA readings will be utilized in the following manner. For each boring in the tank farm, the two (2) soil samples exhibiting the highest OVA readings, between the surface and 4.5 ft elevations, will be analyzed by the laboratory. Between the 4.5 ft elevation and the depth of the boring, an additional two (2) soil samples exhibiting the highest OVA readings will be analyzed by the laboratory. For each boring outside the tank farm bermed area, the four (4) soil samples exhibiting the highest OVA readings will be analyzed by the laboratory. The techniques for using the OVA are addressed in the QAPP. The OVA is not utilized to screen samples for metals analysis.

Soil samples containing concentrations of organics greater than background samples will be defined as contaminated. The extent of contamination will be determined by comparing the concentrations of organics in contaminated samples with concentrations of organics in background samples. If additional soil samples and organic analyses are necessary to define the extent of contamination, then the additional soil samples will be selected on the basis of the correlation between OVA readings and laboratory analysis of organics.

The solvents handled in the tank farm at the HCC facility may contain or have contained EP toxic metals that may be present in the soil and groundwater. Lead has been identified in groundwater samples collected in the past. Metals analyses listed in Table 2 of Section 2.4 will initially be performed on the soil boring samples showing the

three highest concentrations of organics based on laboratory results. Constituent metal analysis of the soil samples and EP toxicity analysis of soil leachate will be performed. If metal(s) identified at concentrations greater than uncontaminated background soil samples, then samples will be defined as contaminated. extent of contamination will be determined comparing the metals the contaminated concentrations of in samples concentrations in the background samples. If additional samples are determine the extent, samples will be analyzed required to sequentially beginning with samples showing the highest concentrations of organics. The EP toxicity test for metals in soil leachate will not be conducted, if the constituent metals concentrations in the soil are at low enough levels that even if the total quantity of constituent metals were to be leached from the soil, the leachate would not be EP toxic.

Soil boring Nos. SB-13 and SB-14 will be taken in an area remote to the tank farm, where no known contamination exists. Soil boring No. SB-13 will be taken from an area north of the existing buildings on the facility property, which relative to the groundwater flow direction is downgradient. Soil boring No. SB-14 will be taken from area of the HCC facility south of existing buildings, which relative to groundwater flow direction is upgradient. Soil samples from each of these borings will be collected at three (3) ft intervals. The soil samples taken at each elevation of the borings will be composited to yield one (1) soil sample from boring No. SB-13 and one (1) soil sample from boring No. SB-14. These samples will be considered to be clean background soil for comparison to all soil samples.

The sampling and chemical analyses protocols for the soil samples are discussed in the QAPP, which is appended to this report. Additional soil samples may be required if contamination is found to be occurring and the proposed soil borings do not provide sufficient information to determine its extent.

2.4 Summary of Site Investigation

Table 2 presents a summary of all the chemical analyses that will be conducted for groundwater and soil samples. Protocols for sampling and analyzing that are presented in the QAPP will be strictly followed in order to avoid contamination of the samples, to ensure the accuracy of the results and to have the results represent the actual conditions of the site. Strict chain-of-custody procedures will be followed. These procedures are discussed in detail in the QAPP, which is appended to this report.

Eder Associates Consulting Engineers, P.C. (EA) will supervise all site investigation work, including the drilling of additional groundwater monitoring wells. EA will also conduct a sampling program in accordance with the established protocols.

All chemical analyses will be conducted by an outside, EPA contract laboratory. All laboratory analyses will be conducted in a manner that follows the established protocols.

The results from the site investigation will be used to assess the potential hazards, if any, to health or the environment at the HCC site. This assessment will be used to determine a recommended corrective action to alleviate the potential problems, if any are found to exist.

HUKILL CHEMICAL CORPORATION BEDFORD, OHIO

TABLE 2

SUMMARY OF SAMPLE TYPES AND CHEMICAL ANALYSES

	Gro	undwater	<u>Soil</u> (1)
Acetone		X	X
Benzene		X	X
Methyl Ethyl Ketone		X	X
Methylene Chloride		X	· x
1.1.1 Trichloroethane		X	X
Tetrachloroethylene	·	X	X
Trichloroethylene		X	X
Toluene	. •	X	X
Xylene		X	X
Methanol		X	x
Ethanol		X	x
Isopropyl Alcohol		X	X
Isobutanol		X	x
Butyl Acetate		X	x
Ethyl Acetate		X	X
Alyphatic Hydrocarbons		×	X
VOC Scan	100	X	X
Arsenic		Χ.	X
Barium		X	X
Cadmium		X	X
Chromium		X	x
Lead		X	X · ·
Mercury		X	X

Table 2 Continued . . .

			·	Groundwater	<u>Soil</u> (1)
Selenium		·		X	x
Silver				X	X
pН	1 P			X	
TOC			•	X	
TOX	• •		٠,	X	
Specific Cond	ductivity			X	
% Solids		 :			X

NOTES:

1. All soil samples will be stored for metals analysis. Constituent metal analysis of soil samples and EP toxicity of soil leachate will be performed. Initially three soil samples exhibiting the highest concentrations of solvents will be analyzed. Additional soil samples may be analyzed for metals.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V

DECENVED DEC 27 1984

REGIONAL HEARING CLERK U.S. ENVIRONMENTAL PROTECTION AGENCY

DOCKET NO.

IN THE MATTER OF:

Hukill Chemical Corporation 7013 Krick Road Bedford, Ohio 44146

EPA ID No. OHD 001-926-740

COMPLAINT, FINDING OF VIOLATIONS AND ORDER

Y-W- 85 R-014

This Complaint is pursuant to Section 3008 of the Resource Conservation and Recovery Act of 1976, as amended (RCRA), 42 U.S.C. §6928, and is equivalent to a Compliance Order referred to in that Section. The Complainant is the Director, Waste Management Division, Region V, United States Environmental Protection Agency (U.S. EPA). The Respondent is Hukill Chemical Corporation, located at 7013 Krick-Road, Bedford, Ohio 44146.

INTRODUCTION

This Complaint is based on information available to U.S. EPA including compliance inspections conducted by the Ohio Environmental Protection Agency (OEPA) as an authorized representative of the U.S. EPA on April 29, 1981, May 27, 1982, April 28, 1983 and May 10, 1983. A joint site visit was also conducted by U.S. EPA and OEPA on July 11, 1983, and a joint compliance inspection on July 10, 1984. At the time of the inspections, violations of applicable Federal statutes and applicable Federal and State regulations were identified.

On July 15, 1983, the State of Ohio received Phase I interim authorization pursuant to Section 3005 of RCRA (42 U.S.C.§ 6925). This authorization allows the State and U.S. EPA to enforce those portions of Ohio regulations where applicable in lieu of Federal statutes. U.S. EPA has retained authority in those areas where State authorization has not been delegated. Accordingly, this Compliance Order enforces both Federal and State regulations as applicable. Pursuant to 42 U.S.C. §6928(a) and

based on information cited herein, it has been determined that Hukill Chemical Corporation has violated regulations promulgated under Subtitle C of RCRA, Sections 3004 and 3005, 42 U.S.C. §6924 and § 6925; Federal regulations 40 CFR 270.13(h), 40 CFR 265.14, 40 CFR 265.15, 40 CFR 265.35, 40 CFR 265.52(f), 40 CFR 265.72, 40 CFR 265.73, 40 CR 265.173, 40 CFR 265.194 and 40 CFR 270.10 and Ohio Administrative Code (OAC) regulations 3745-54-31, 3745-54-15, 3745-65-35, and 3745-55-71.

FINDINGS

This determination of violation is based on the following:

- 1. Section 3010 of RCRA requires any person who generates or transports hazardous waste or owns or operates a facility for the treatment, storage, or disposal of hazardous waste to notify U.S. EPA of such activity within 90 days of the promulgation of regulations under Section 3001 of RCRA. Section 3010 of RCRA also provides that no hazardous waste subject to regulations may be transported, treated, stored, or disposed of unless the required notification has been given. 42 U.S.C. §6930.
- 2. U.S. EPA published regulations concerning the generation, transportation, and treatment, storage or disposal of hazardous waste on May 19, 1980. These regulations are codified at 40 CFR Parts 260 through 265. Notification to U.S. EPA of hazardous waste handling was required in most instances no later than August 19, 1980.
- 3. Section 3005 of RCRA requires U.S. EPA to publish regulations requiring each person owning or operating a hazardous waste treatment, storage, or disposal facility to obtain a RCRA permit. Such regulations were published on May 19, 1980, and are codified at 40 CFR Parts 270 and 271 (formerly Parts 122 and 123).

The regulations require that persons who treat, store, or dispose of hazardous waste Submit Part A of the permit application in most instances no later than November 19, 1980.

- 4. Section 3005(e) of RCRA provides that an owner or operator of a facility shall be treated as having been issued a permit pending final administrative disposition of the permit application if:
 - (1) the facility was in existence on November 19, 1980;
 - (2) the requirements of Section 3010(a) of RCRA concerning notification of hazardous waste activity have been complied with; and
 - (3) application for a permit has been made. This statutory authority to operate is known as interim status. U.S. EPA regulations implementing these provisions are found at 40 CFR Part 270.

RESPONDENT

- 5. The Respondent, Hukill Chemical Corporation, owns and operates a facility at 7013 Krick Road, Bedford, Ohio 44146. The Respondent is an Ohio corporation whose registered agent in Ohio is Emory G. Hukill, 7013 Krick Road, Bedford, Ohio 44146.
- 6. The Respondent is in the business of reclaiming spent chemicals from various sources, and blending and packaging acids. It is also engaged in chemical drum storage and above-ground bulk storage of chemical wastes, acids and other reprocessed chemicals. It has achieved interim status to store hazardous waste in containers and tanks. The Respondent was required to submit an application for a final permit to operate the facility by September 30, 1982.

7. Respondent's facility is located in an industrial parkway. It is situated on an unnamed tributary to Tinkers Creek. Tinkers Creek flows through the Cleveland Metroparks and then empties into the Cuyahoga River.

TANK FARM VIOLATIONS

8. Section 3004 of Subtitle C of RCRA, provides, in pertinent part, as follows:

"The Administrator [of the U.S. Environmental Protection Agency] shall promulgate regulations establishing such performance standards, applicable to owners and operators of facilities for the treatment, storage, or disposal of hazardous waste identified or listed under this Subtitle, as may be necessary to protect human health and the environment."

Regulations implementing Section 3004 of the RCRA were promulgated by the Administrator on May 19, 1980. The effective date of these regulations is November 19, 1980.

- 9. The hazardous waste management regulations require owners and operators of hazardous waste management facilities to maintain and operate such facilities in a manner that minimizes the possibility of threat to human health or the environment from any fire, explosion, or unplanned sudden or nonsudden release of hazardous waste or hazardous waste constituents into the air, soil or surface waters. OAC 3745-54-31.
- 10. Owners and operators of hazardous waste facilities are required to conduct frequent inspections for malfunctions and deterioration, operator errors, and discharges which may be causing or lead to a threat to human health or releases of hazardous waste constituents to the environment, and to take steps to remedy such problems to insure that they do not lead to an environmental or human health threat. OAC 3745-54-15.
- 11. Respondent has violated the regulations cited in paragraphs 9 and 10 above; as a result hazardous waste and hazardous waste constituents have been released into

the solvent tank farm area with the potential of contaminating the soil and groundwater, and creating a potential threat to human health and the environment.

PART A PERMIT REQUIREMENT VIOLATIONS

- 12. Owners and operators of hazardous waste management facilities were required to submit a scale drawing showing all past, present and future treatment, storage and disposal areas at their facilities by November 19, 1980. 40 CFR 270.13(h).
- 13. On November 12, 1980, Respondent submitted a scale drawing to U.S. EPA of storage and disposal areas that failed to illustrate a buried cistern or tank located on the east side of Respondent's property. Submittal of the incomplete drawing is a violation of 40 CFR Section 270.13(h). The buried tank has received hazardous waste and hazardous waste waters from the facility's solvent reclaiming operations for storage. The tank is corroding, and wastes or waste waters from the buried tank have been or may be released into the surrounding soils as a result of tank corrosion and thus constitutes a potential threat to human health and the environment.

HAZARDOUS WASTE MANAGEMENT VIOLATIONS

- 14. RCRA compliance inspections of the facility were conducted by the OEPA as an authorized representative of the U.S. EPA on April 29, 1981, May 27, 1982, and April 28, 1983 and May 10, 1983. A joint site visit was also conducted by the U.S. EPA and OEPA on July 11, 1983 and a joint compliance inspection on July 10, 1984.
- 15. The following violations were observed during an OEPA April 29, 1981, inspection:
 - (a) Failure to keep records of malfunctions, records of operator error, and records of discharges as required by 40 CFR 265.15;

- (b) Failure to include in the contingency plan an evacuation plan for facility personnel as required by 40 CFR 265.52(f).
- (c) Failure to provide controlled entry to the facility as required by 40 CFR 265.14; and
- (d) Failure to maintain an operating record as required by 40 CFR 265.73.
- 16. The Respondent was notified of the violations and provided a copy of the April 29, 1981, inspection by an OEPA letter dated August 26, 1981.
- 17. The following violations were observed during an OEPA May 27, 1982, inspection:
 - (a) Failure to have an artificial or natural barrier completely surrounding the active portion of the facility as required by 40 CFR 265.14(b)(2)(i); and
 - (b) Failure to provide controlled entry to the facility as required by 40 CFR 265.14(b)(2)(ii).
- 18. The Respondent was notified of the violations and provided a copy of the May 27, 1982, inspection by an OEPA letter dated August 17, 1982.
- 19. The following violations were observed during OEPA inspections on April 28 and May 10, 1983:
 - (a) Failure to maintain a log which records inspections of the loading and unloading areas as required by 40 CFR 265.15(b)(4) and 40 CFR 265.15(d);
 - (b) Failure to include in the written operating record the U.S. EPA hazardous waste numbers and handling codes for the hazardous waste in the storage areas as required by 40 CFR 265.73(b)(1); and

- (c) Failure to include all the necessary information on the tank inspection log as required by 40 CFR 265.194.
- 20. The Respondent was notified of the violations and provided a copy of the April 28 and May 10, 1983, inspection report by an OEPA letter dated May 19, 1983.
- 21. The following violations were observed during an OEPA/U.S. EPA joint site visit on July 11, 1983:
 - (a) Failure to provide adequate aisle space in several sections of the drum storage areas as required by 40 CFR 265.35;
 - (b) Failure to store certain drums in a closed position as required by 40 CFR 265.173; and
 - (c) Failure to submit a revised Part A and receive U.S. EPA approval for an increase in storage capacity of drums as required by 40 CFR 270.72(b).
- 22. The following violations were observed during an July 10, 1984 OEPA/U.S. EPA joint inspection:
 - (a) Failure to provide needed aisle space in several
 sections of the drum storage areas as required by OAC 3745-65-35; and
 (b) Failure to store a container holding hazardous waste
 in good condition as required by OAC 3745-55-71.
- 23. The Respondent was notified of the violations and provided a copy of July 10, 1984, inspection by an OEPA letter dated July 24, 1984.

PART B PERMIT REQUIREMENT VIOLATIONS

24. In a letter dated March 31, 1982, U.S. EPA required the Respondent to submit Part B of its permit application, pursuant to 40 CFR 270.10(e)(4).

The Respondent submitted a Part B application on September 30, 1982.

- 25. In a letter dated October 25, 1982, the U.S. EPA requested OEPA to conduct a completeness review. In a letter dated November 10, 1982, the OEPA informed U.S. EPA that a completeness check had been conducted and several required items had not been submitted. In a letter dated December 1, 1982, to Respondent, U.S. EPA detailed the deficiencies found and requested that the Respondent submit the required information within 30 days.
- 26. In a letter dated February 23, 1983, the Respondent submitted additional information to U.S. EPA addressing the deficiencies noted by U.S. EPA. This submittal was almost two months past the due date.
- 27. In a letter dated March 17, 1983, U.S. EPA requested that the OEPA perform a completeness review of the additional information submitted by the facility. In a letter to U.S. EPA dated March 29, 1983, the OEPA stated that the Fart B application was judged to be complete. In a letter to Respondent dated August 22, 1983, U.S. EPA stated that the Part B application was complete and that the adequacy review would now begin.
- 28. In a letter dated October 4, 1983, to U.S. EPA the OEPA forwarded their technical adequacy comments. In a letter dated December 29, 1983, to the Respondent U.S. EPA detailed the technical adequacy comments made by OEPA, and requested a response within 30 days.
- 29. In a letter dated January 30, 1984 to U.S. EPA, the Respondent requested several more weeks to complete its submittal.
- 30. In a letter dated May 15, 1984, to the Respondent, OEPA requested that the information be submitted by May 31, 1984, to address each deficiency;

in the absence of an acceptable response, OEPA would recommend denial of Respondent's Part B application and termination of interim status.

- 31. In a letter dated May 31, 1984, to OEPA the Respondent submitted a response to the adequacy comments. This submittal was approximately four months late. The submittal did not fully address some of U.S. EPA's and OEPA's concerns, and others concerns were not addressed at all in the response.
- 32. In a letter dated July 16, 1984, to the Respondent, the OEPA sent the results of another adequacy review showing that deficiencies still existed. OEPA requested review a complete response to all items by September 1, 1984. Major deficiencies listed included tank thickness testing, detailed engineering drawings for each tank, and a demonstration that containers said to have no free liquids do in fact have no free liquids.
- 33. In view of the above, the Respondent has failed to submit the information in full as required by 40 CFR 270.10(a) and 40 CFR 270.10(e)(4).

ORDER AND CONDITIONS FOR CONTINUED OPERATION

Respondent having been initially determined to be in violation of 42 U.S.C. §6925, the following Compliance Order pursuant to 42 U.S.C. §6928(a)(1) is issued.

IT IS HEREBY ORDERED that Respondent, Hukill Chemical Corporation, shall perform the following:

A. Respondent shall within forty-five (45) days of receipt of this Complaint cease all treatment, storage or disposal of any hazardous waste except such treatment, storage or disposal at the facility as shall be in complete compliance with the applicable Ohio Hazardous Waste Rules, OAC 3745-65-01 through 3745-69-30.

- B. Respondent shall within forty-five (45) days of the receipt of this Order submit a closure plan as specified in OAC 3745-66-10 through 3745-66-20. The closure plan shall address, but not necessarily be limited to, the following items:
 - (1) Sample locations, depths, and techniques for collecting surface and subsurface soil samples to define the extent of soil contamination both within and without the diked storage area in the solvent tank farm. Parameters selected for analysis shall reflect the types of waste stored presently and in the past in this storage area.
 - (2) Removal techniques, disposal or treatment options for the maximum volume of possibly contaminated soil, and associated costs.
 - (3) Backfilling of any removed contaminated soil with low permeability materials, removal of the stand pipes in the northeast and southwest corners of the tank farm, installation of an automatic system for dewatering purposes, and a means to prevent overtopping of the tanks.
 - (4) Installation of groundwater monitoring wells in locations and at depths suitable to determine the possible impact of the solvent tank farm on groundwater quality. Parameters selected for analysis shall reflect the types of waste stored presently and in the past in this storage area.
 - (5) Closure of the underground hazardous waste storage cistern. This shall include plans for certification by a professional engineer that all floor drains in the active portion of the facility which connect to the underground system are permanently sealed.